

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

March 28, 2013

Via E-mail

Dr. Yaron Daniely Chief Executive Officer, President and Director Alcobra Ltd. 65 Rothschild Blvd. Tel Aviv 65785 Israel

Re: Alcobra Ltd.

Amendment No. 2 to Registration Statement on Form F-1

Filed March 19, 2013 File No. 333-186003

Dear Dr. Daniely:

We have reviewed your amended registration statement and response letter each filed March 19, 2013, and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments.

Dilution, page 28

1. You appear to have revised your table to begin with your pro forma net tangible book value per share again. Please refer to our comment 32 issued on February 10, 2013 and revise the table again to begin with your historical net tangible book value per share, instead of pro forma net tangible book value per share.

Financial Statements

Notes to Financial Statements

Note 6: Convertible Notes, page F-15

2. With regard to your response to comment 15 it appears that the convertible notes are within the scope of ASC 480 and should be accounted for under that literature. Please provide a further analysis to support why ASC 835 is more applicable and a materiality

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analysis for the difference between the interest accretion method and the fair value method.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Act of 1933 and all applicable Securities Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

You may contact Keira Nakada at (202) 551-3659 or Lisa Vanjoske at (202) 551-3614 if you have questions regarding comments on the financial statements and related matters. Please contact Karen Ubell at (202) 551-3873, Jennifer Riegel at (202) 551-3575, or me at (202) 551-3710 with any other questions.

Sincerely,

/s/ Daniel Greenspan for

Jeffrey P. Riedler Assistant Director

cc: Via E-mail

Edwin L. Miller, Jr. ZAG/S&W LLP